

FIG. 1A

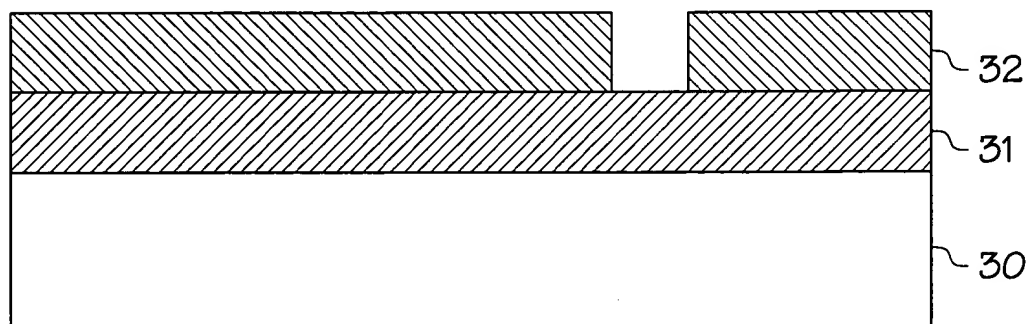


FIG. 1B

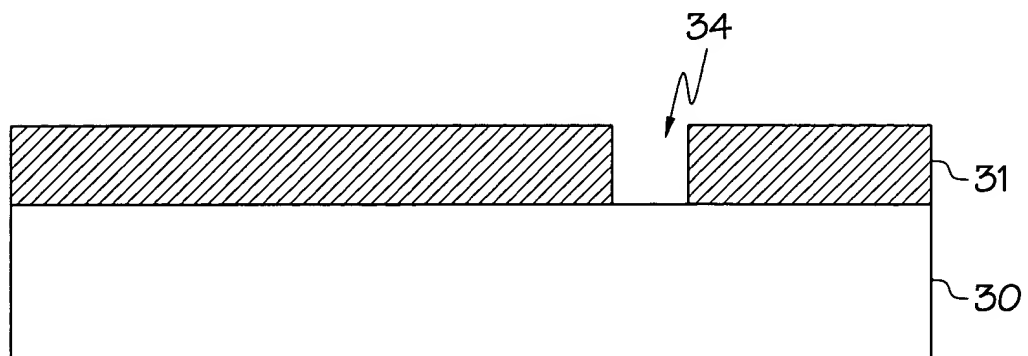


FIG. 1C

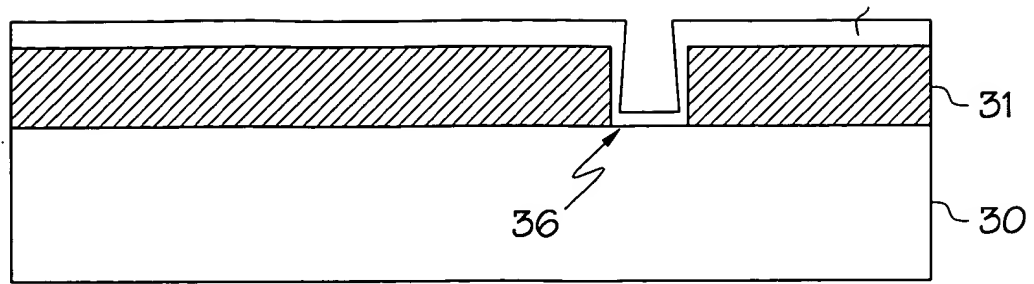


FIG. 1D

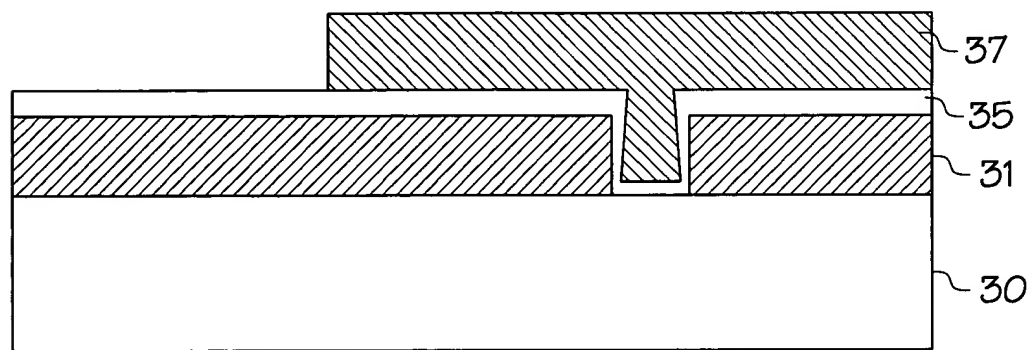


FIG. 1E

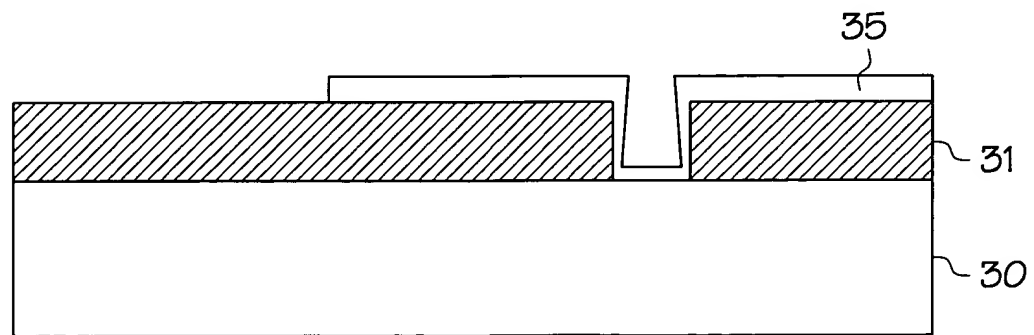


FIG. 1F

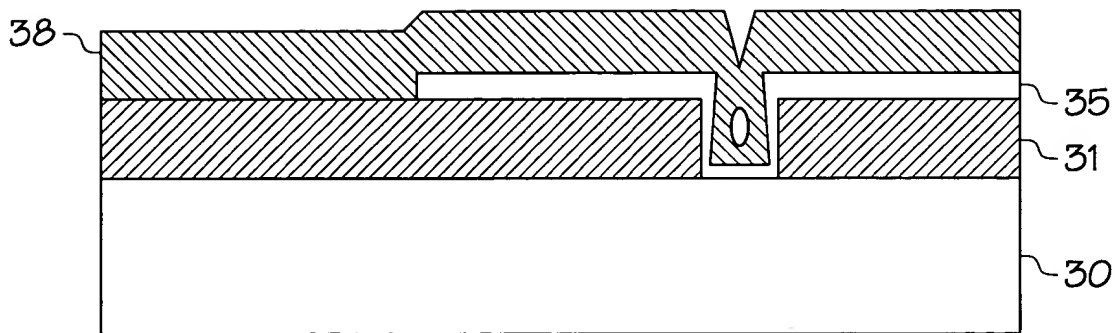


FIG. 1G

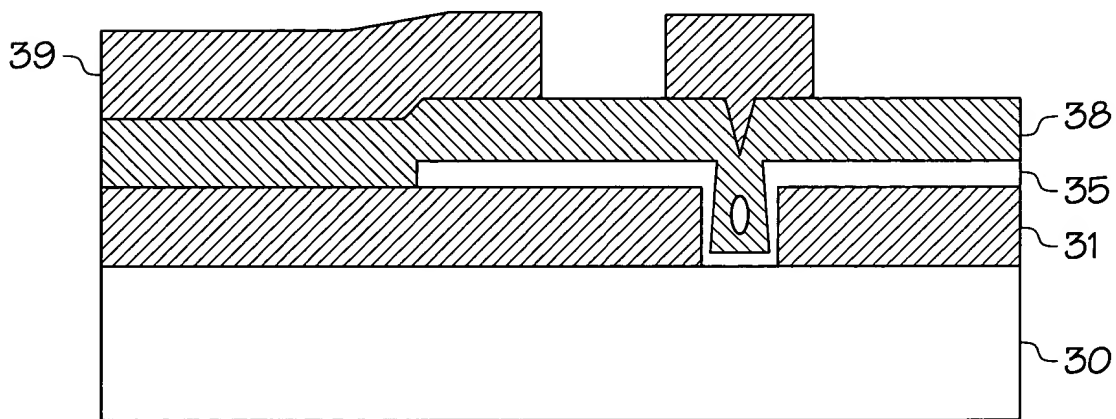


FIG. 1H

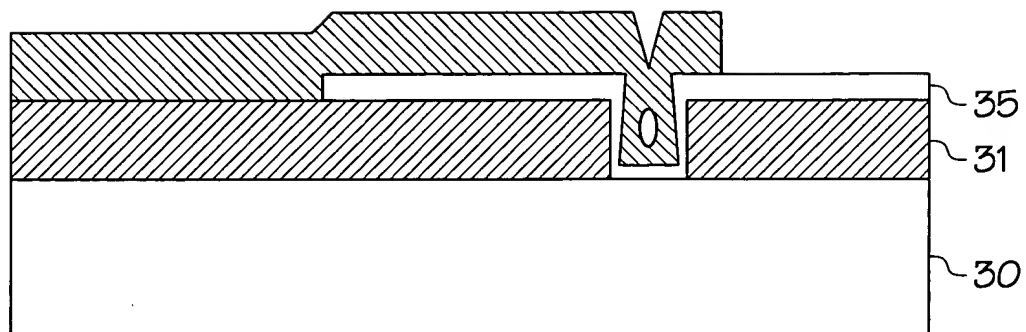


FIG. 1I

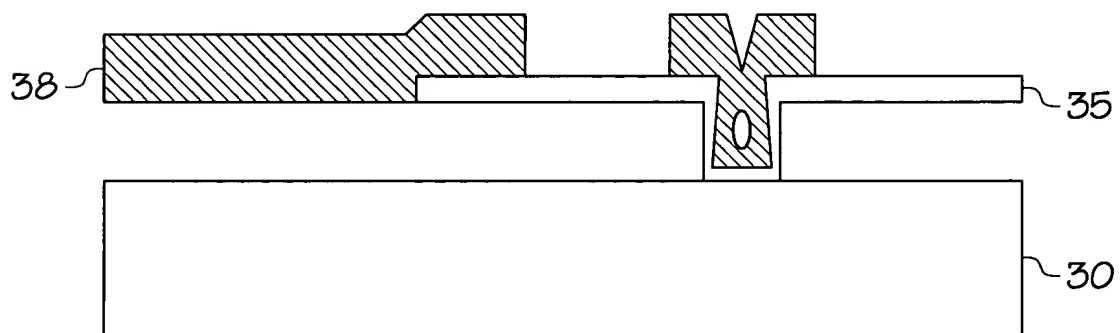


FIG. 1J

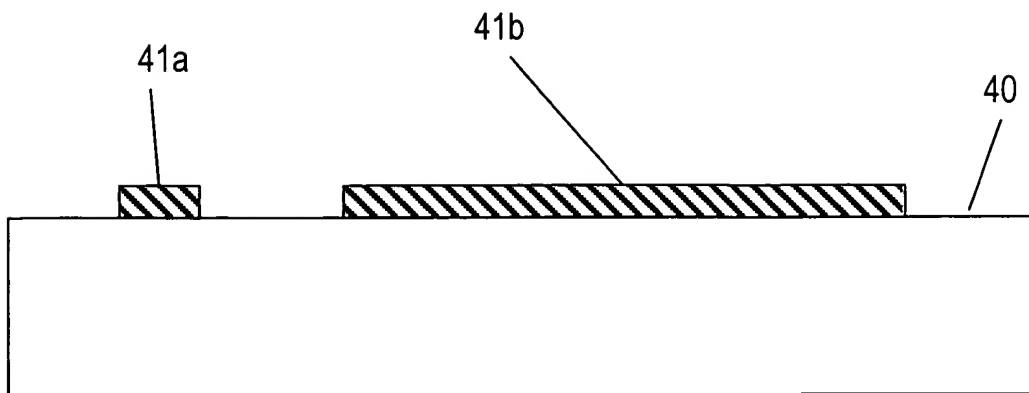


FIG. 2A

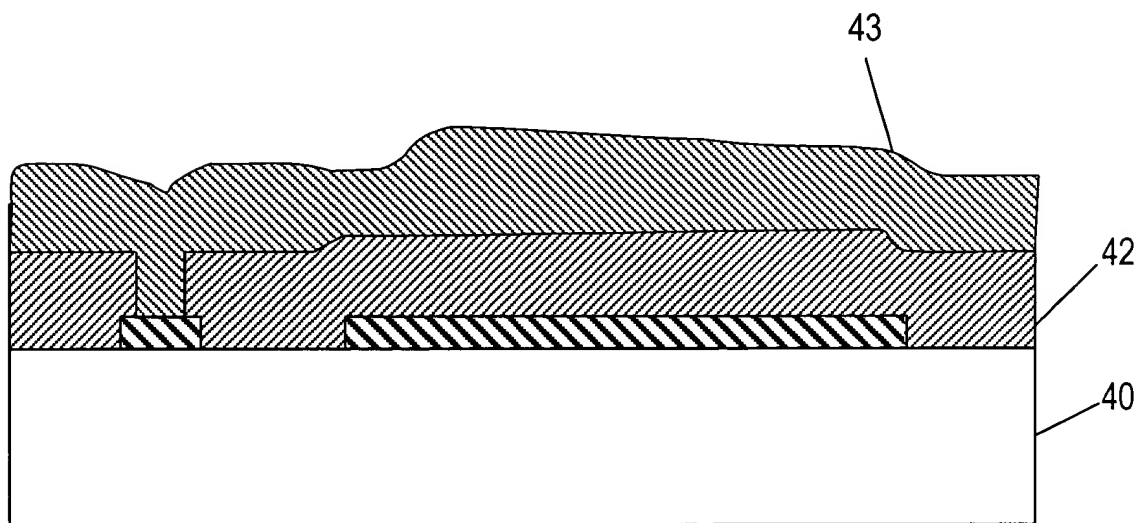


FIG. 2B

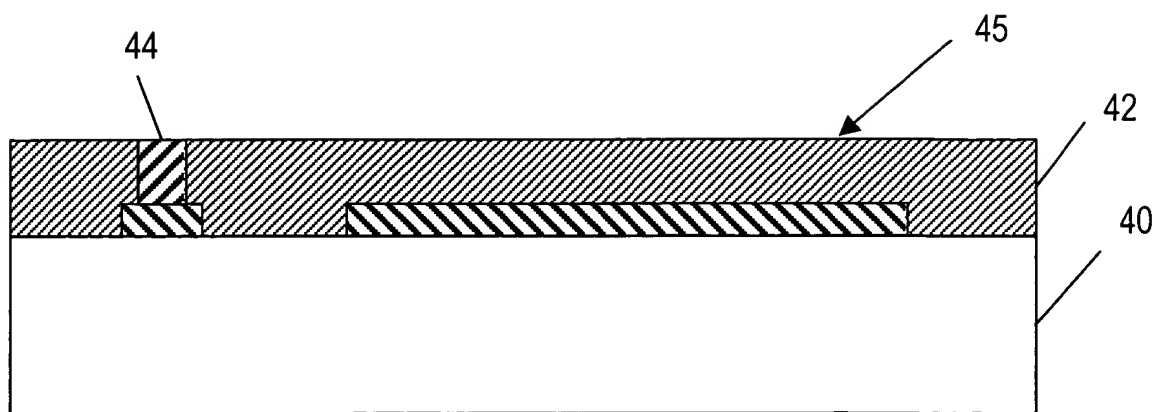


FIG. 2C

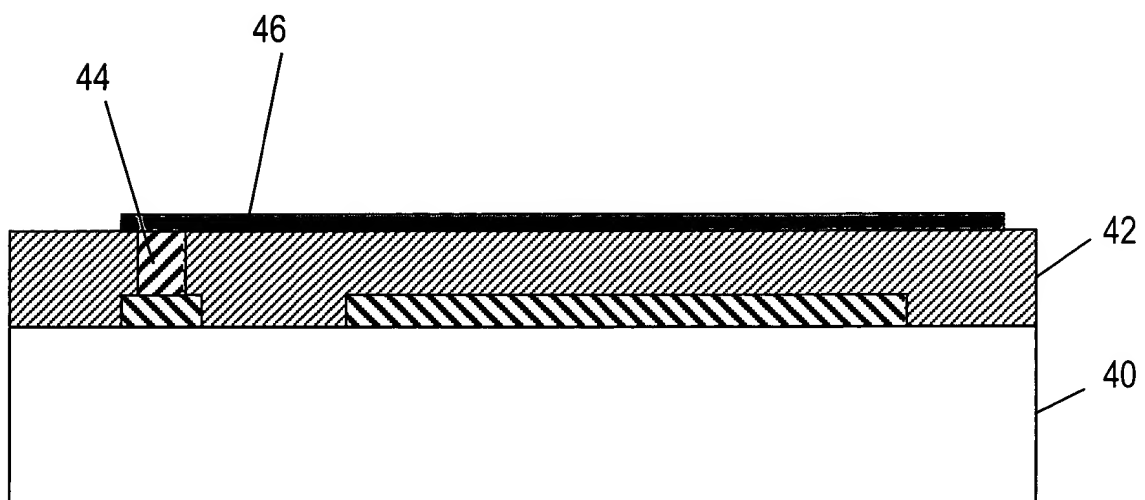


FIG. 2D

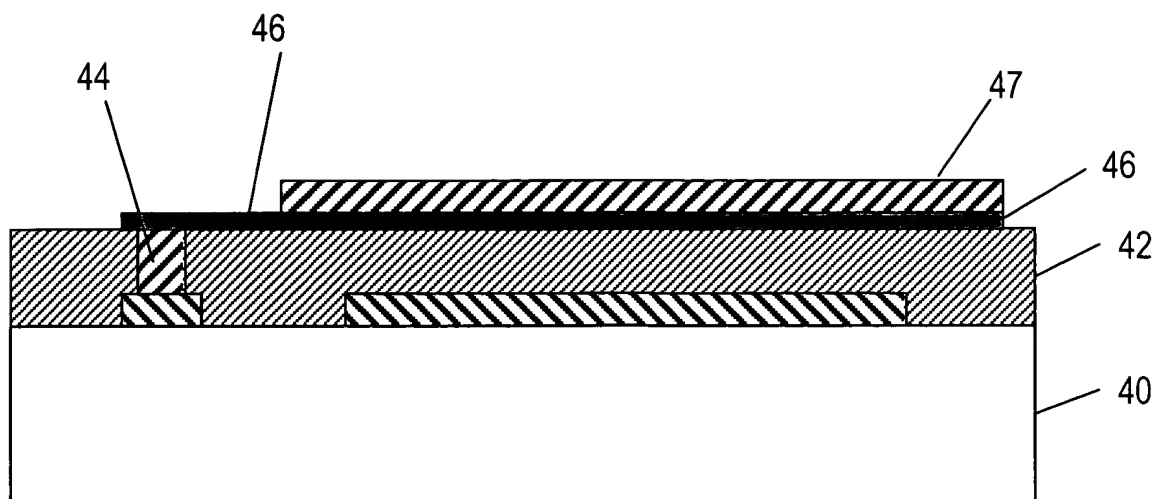


FIG. 2E

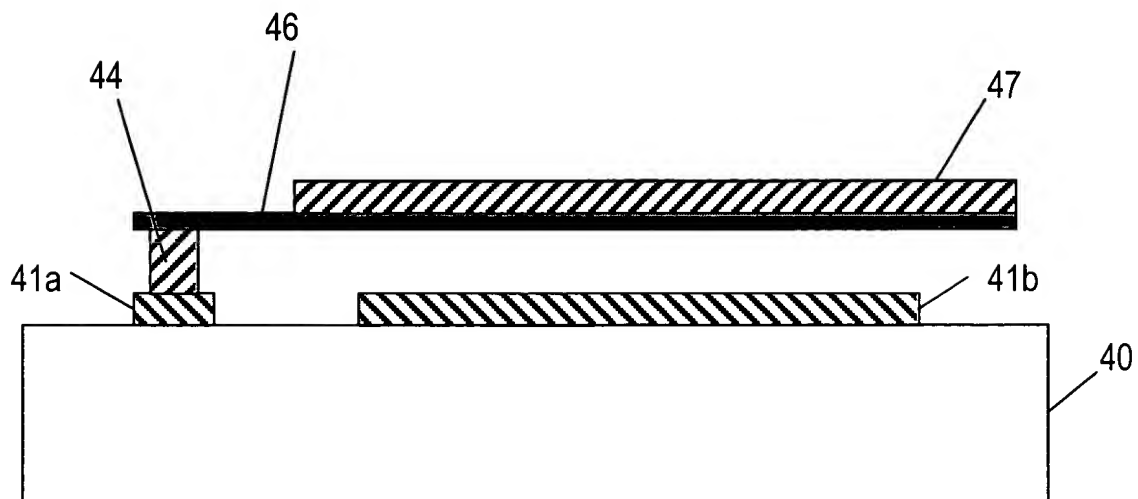


FIG. 2F

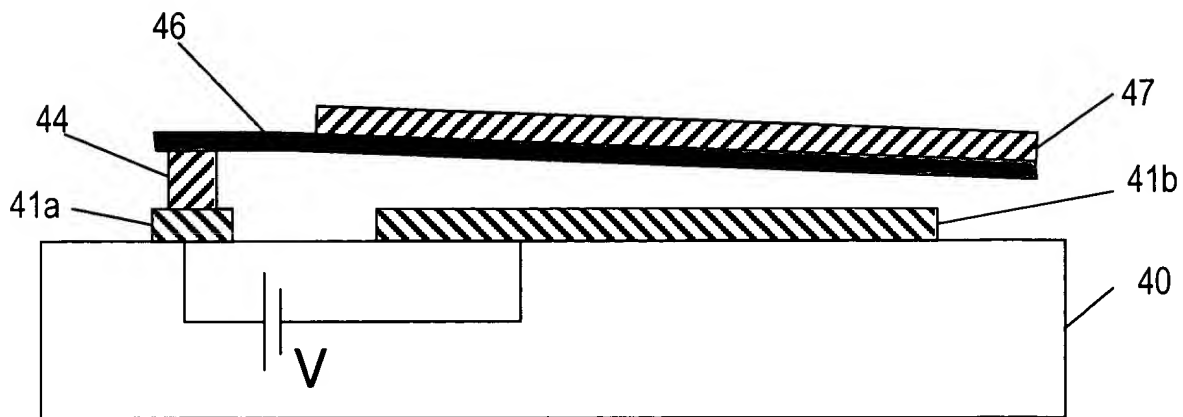


FIG. 2G



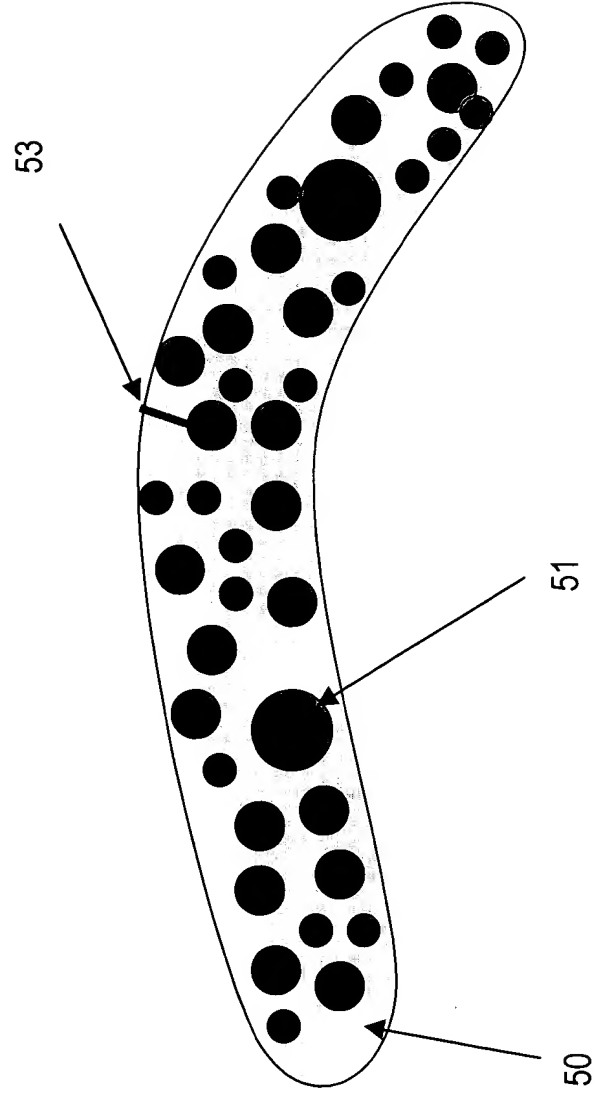
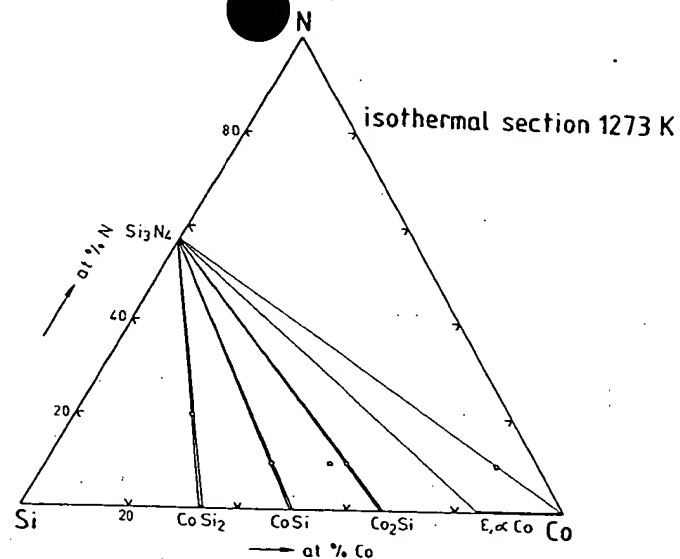


FIG. 3

# Co-Si-N Isothermal Section at 1000 °C

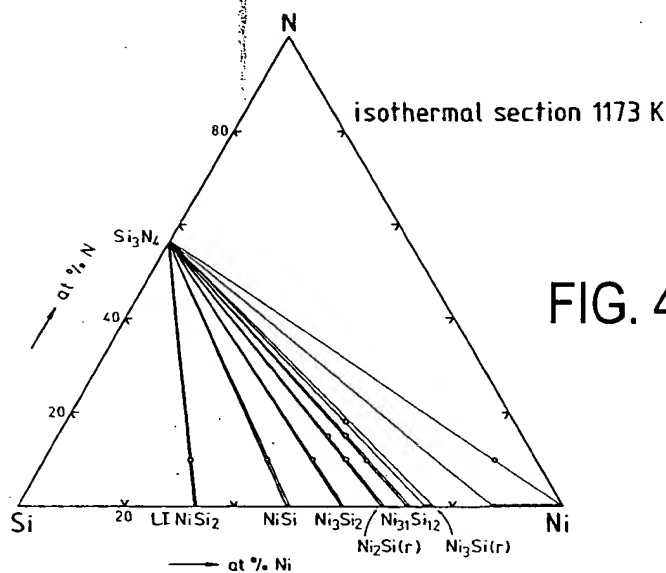
FIG. 4A



In the absence of external nitrogen pressure.

# Ni-Si-N Isothermal Section at 900 °C

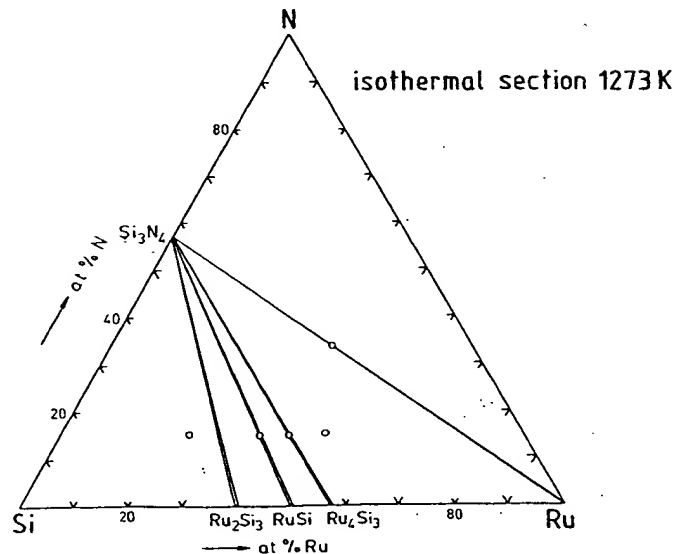
FIG. 4B



In the absence of external nitrogen pressure.

# Ru-Si-N Isothermal Section at 1000 °C

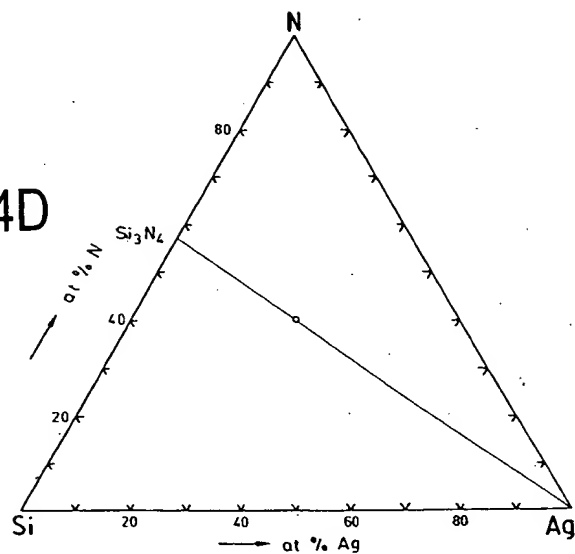
FIG. 4C



In the absence of external nitrogen pressure.

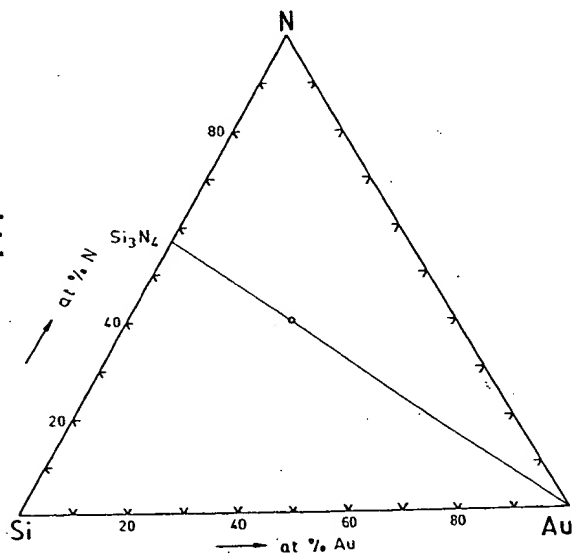
Ag-Si-N Isothermal Section at 900 °C

FIG. 4D



Au-Si-N Isothermal Section at 900 °C

FIG. 4E



Cu-Si-N Isothermal Section at 700 °C

FIG. 4F

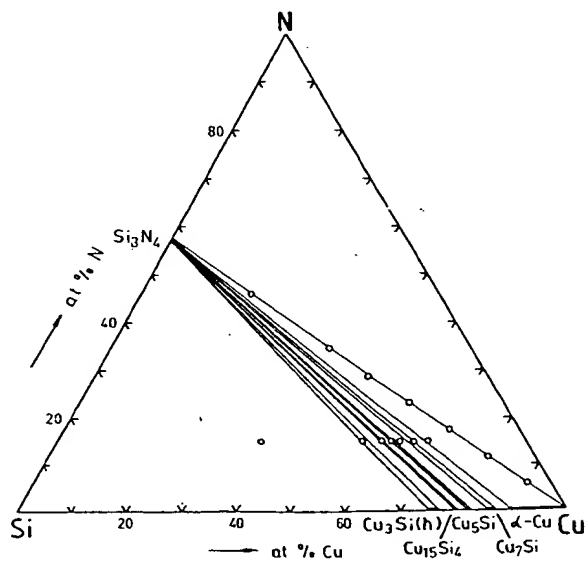


FIG. 4G

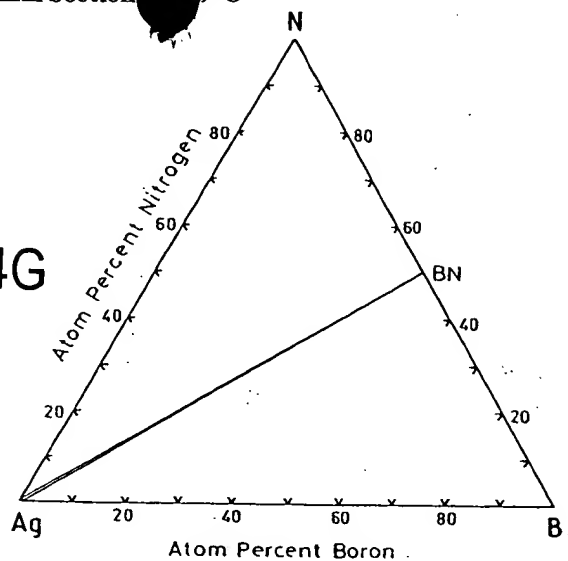


FIG. 4H

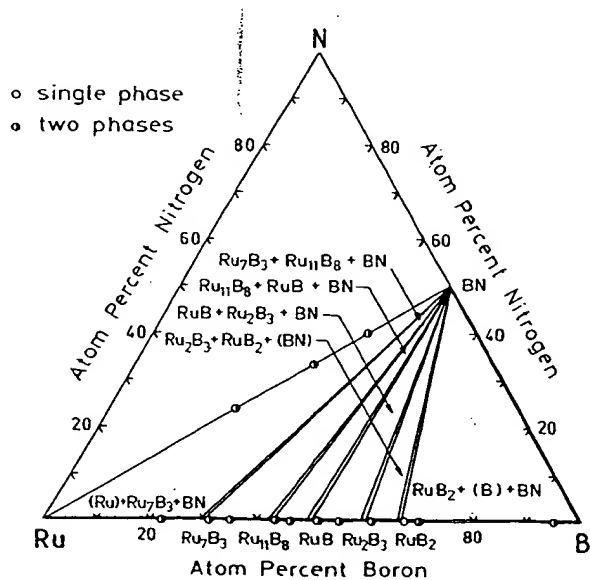
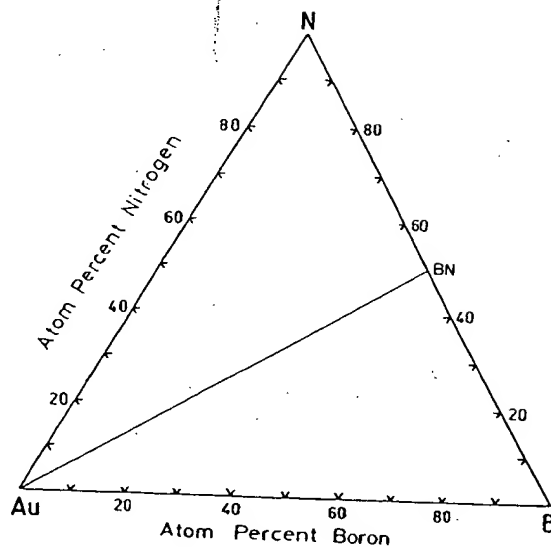
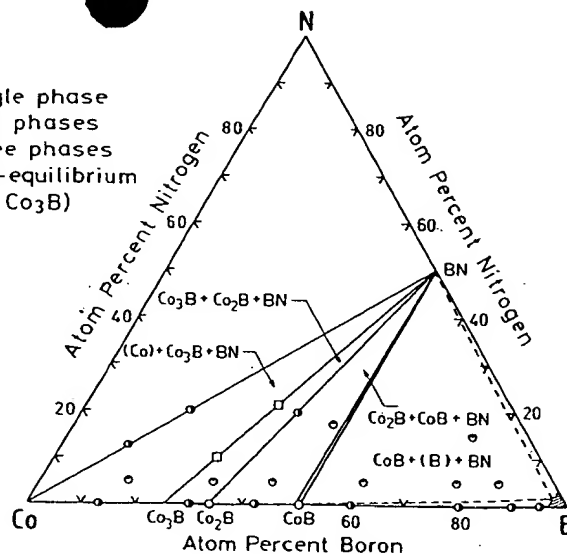


FIG. 4I

Co-B-N Isothermal Section at 900 °C Under  $10^5$  Pa of Argon

- single phase
- two phases
- ◐ three phases
- ◑ non-equilibrium (no  $\text{Co}_3\text{B}$ )

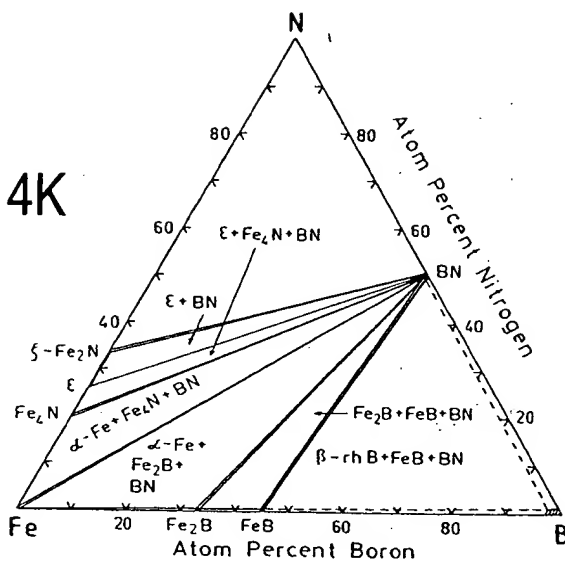
FIG. 4J



Fe-B-N Isothermal Section at 400 °C

In the absence of external nitrogen.

FIG. 4K

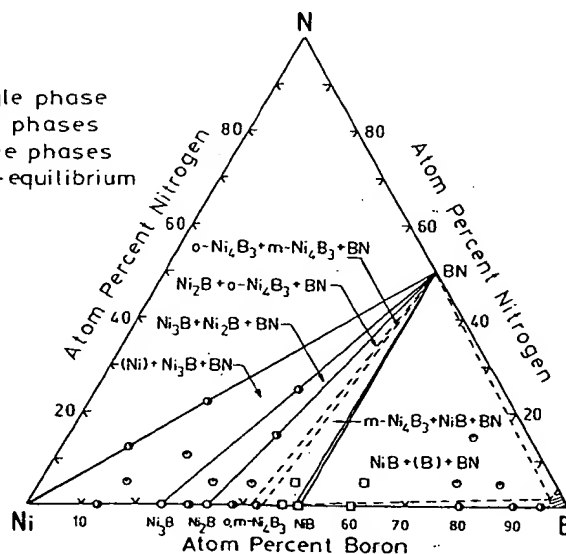


In the absence of external nitrogen. From [51Kie].

Ni-B-N Isothermal Section at 900 °C Under  $10^5$  Pa of Argon

- single phase
- two phases
- ◐ three phases
- ◑ non-equilibrium

FIG 4L



In the absence of external nitrogen.

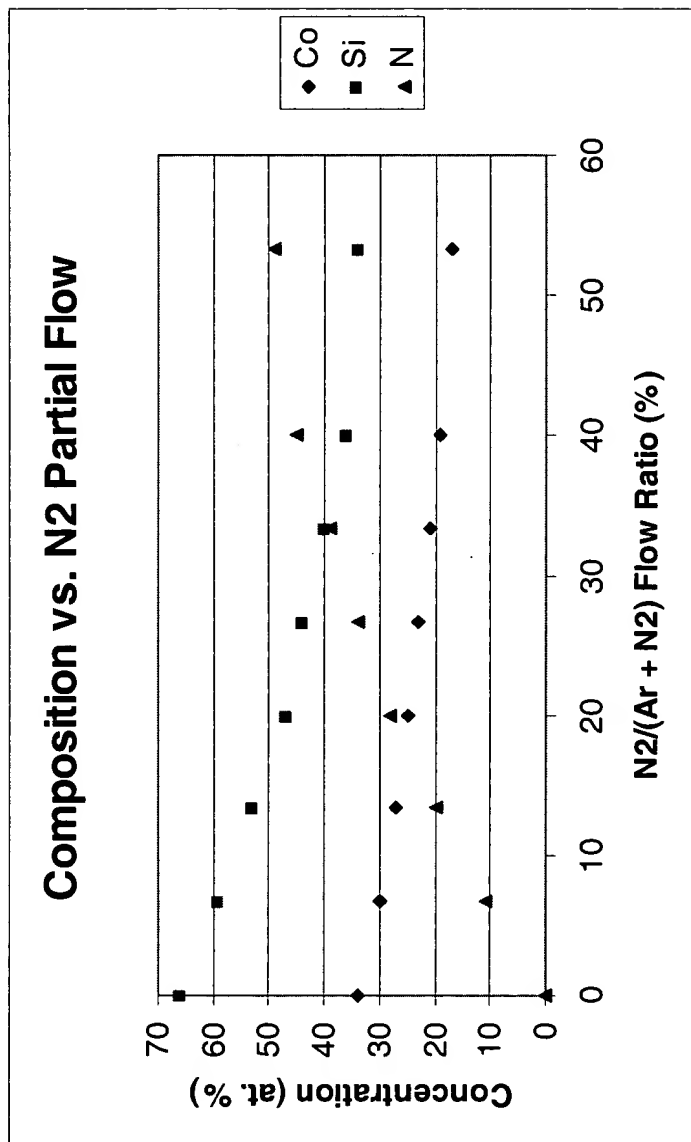


FIG. 5

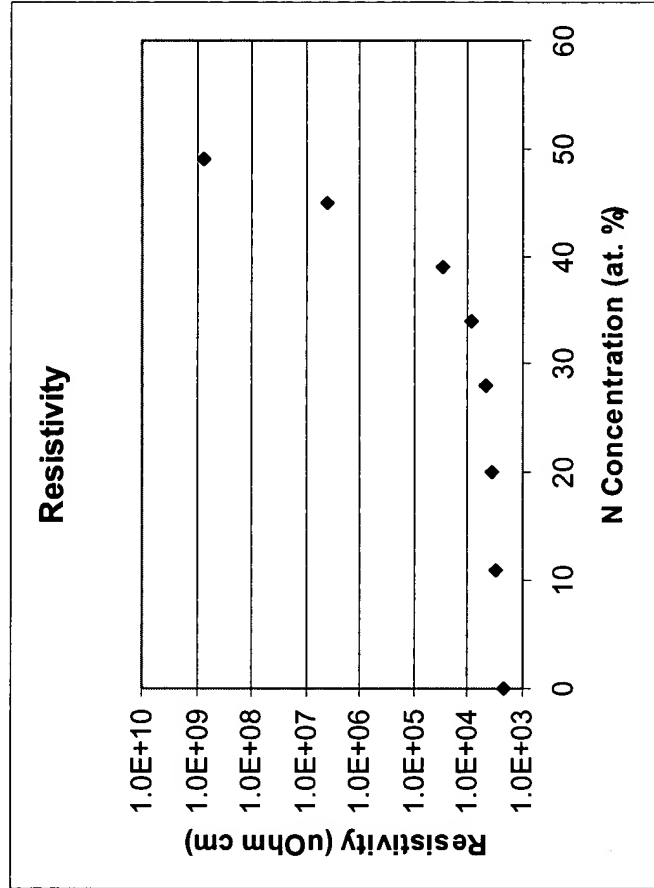


FIG. 6

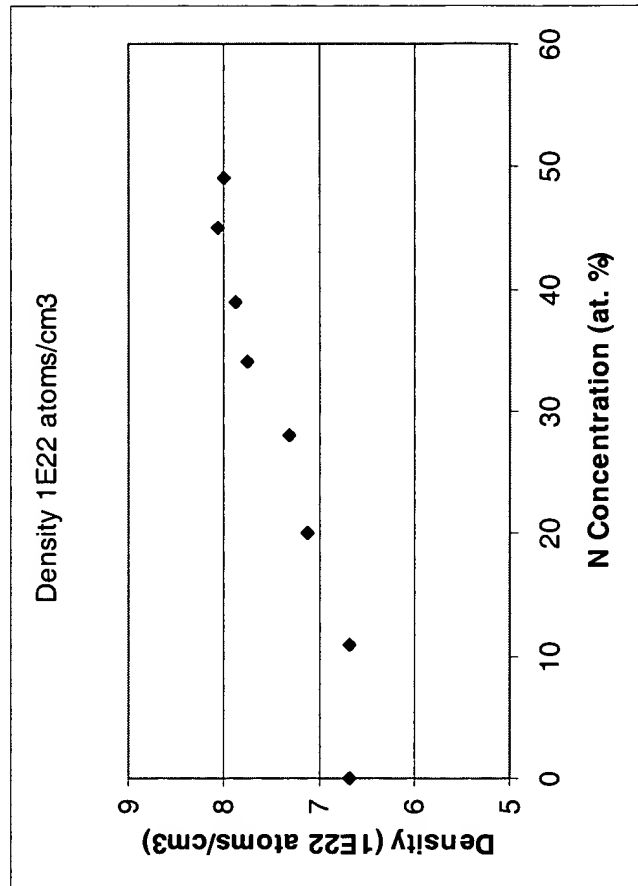


FIG. 7



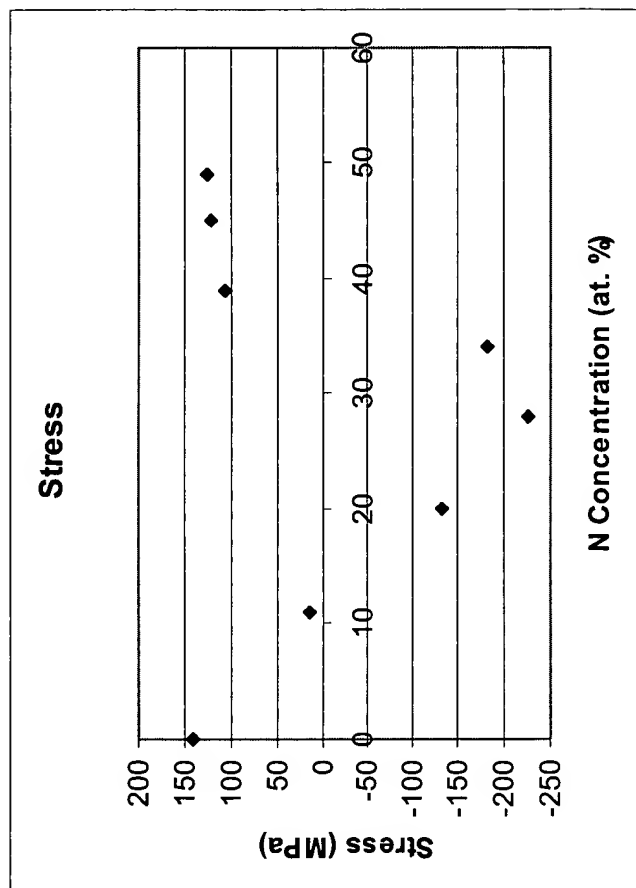
[illegible]

FIG. 8

|          | 10 sccm | 20 sccm | 30 sccm |
|----------|---------|---------|---------|
| Cl2 base | 200     | 230     | 270     |
| CF4 base | 133     | 202     | 202     |

Etching rate comparison

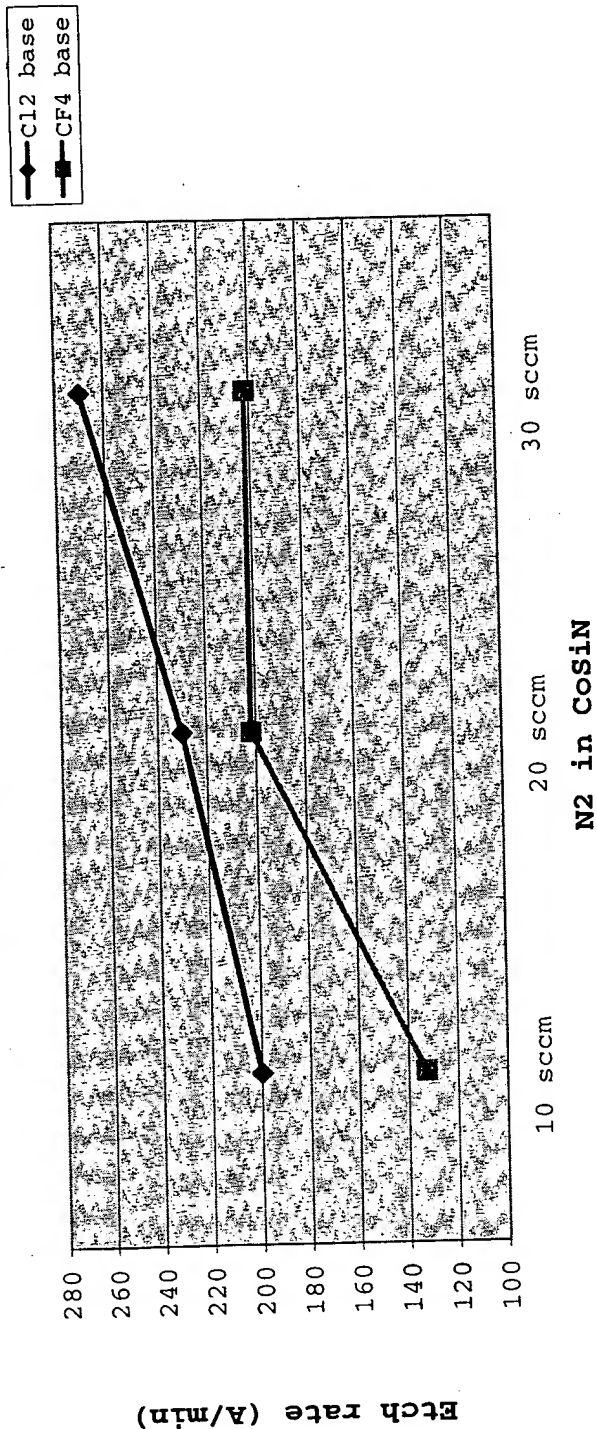


FIG. 9